ABSTRACT

A video encoder differentially encodes an image of a speaker during a visual call. The video encoder comprises a motion estimator for estimating

5 motion of an individual from an input video signal, and calculating a motion vector of the individual; a speaker region detector for detecting a speaker region representing an contour of a speaker from the motion vector; a DCT section for calculating DCT coefficients by DCT-transforming a video signal outputted from the motion estimator; a face region detector for detecting a face region of the

10 speaker from the speaker region based on the DCT coefficients, and generating a differential quantization table by distinguishing the detected face region from non-face regions; an adaptive bit rate controller for differential setting a quantization step size for quantization based on the speaker region; and a quantizer for quantizing the DCT coefficients according to the quantization step

15 size and the differential quantization table.